

S. Thomas June 17-1879

My dear Sir!

Please receive my best thanks for your communication of 3<sup>d</sup> inst. I am very much pleased to learn that I will be able myself to read the proofs once for the sake of the local names, which no doubt will be desirable notwithstanding Mr. Brown's kind offer to correct any misprints in this respect as far as possible.

I am also much obliged for your kindness in correcting the un-idiomatic turns in my English, a difficulty which a foreigner scarcely ever will be able to avoid without assistance.

As I found that the dried specimens of plants, which I had ready for sending on at once, would find room in one larger box, I have had them packed up in one box only, which will be forwarded by this steamer, as the last Brazil boat remained here only a few hours during night-time.

As soon as I have got another lot ready I shall send them on to you together with the physiological specimens in alcohol and dried, such as aerial roots, arborescent vines, fruits, sections of timber, which perhaps may be interesting for determining the difficult question of annual rings of wood formed by tropical trees, a question that on closer inspection of specimens taken on the spot seems to me more undecided than ever, and I should be inclined to think, that tropical trees may very well be able to form two or more rings of wood

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during a year in alternate seasons of drought and wet, which frequently occur in these latitudes and which are the chief agents in respect to vegetative life. If this proves to be the case, which of course would be best ascertained by cultivating or observing some trees during a given period of years, the marvellous age of some trees as reported by travellers, such as the Adansoniæ in Senegal, would no doubt have to be reduced a good deal.

On the whole it would be very desirable if in some place or the other inside the tropics scientific research as to the physiology and biology of the vegetable Kingdom could be instituted on a larger scale and in a thorough way. As yet the tropical flora has been nearly exclusively investigated for systematical or horticultural purposes, and hothouses in cold climates can hardly substitute the natural localities where the species grow.

The botanical gardens in hot countries have not as far as I am aware of hitherto occupied themselves with research of the kind alluded to, and yet they would afford a splendid opportunity for many interesting observations. I shall only mention the mysterious law that governs the time of flowering of most tropical plants, which regardless of dry or wet weather, bloom at certain regular seasons of the year, although it would seem, as if the conditions for their doing so in some years arrive at a much earlier period than in others.

Furthermore the interesting question of why some trees in these climates shed their leaves and others not, even such as have apparently the same kind of foliage, as among Leguminosæ some Mimosææ and others not; also the curious phenomenon of precocious flowering, especially for explaining the remarkable fact, that individuals, which do not flower, do not shed their

leaves, whilst others, which are to flower in the same species, drop their entire foliage.

It may be hoped, that as taste for science spreads in your great country, men of sufficient ability and means will be found; not only to explore these West Indian Islands for instance, that most naturally seem to belong to the United States, not only as far as regards their flora from a systematical point of view, but also as far as the biology of the vegetation is concerned. There is here no doubt an ample field for work, and I should be glad to hear of some American botanist coming out to Portorico and Haiti to supplement my work on the Virgin Islands, thereby also no doubt bringing a good deal of new light on the interesting question of the origin of species, which, if ever, will sooner be solved by investigating the distribution over an Archipelago like the West Indian of the species, than by the results obtained during a short number of years by hybridizing or natural selection of the fittest. I am, dear Sir, with sincere regards

Yours sincerely  
Roggers